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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,337	07/14/2003	Rajnish Batlaw	5331A	6796
7590 11/05/2003				
William S. Parks P.O. Box 1927 Spartanburg, SC 29304				
EXAMINER SHOSHO, CALLIE E				
ART UNIT 1714		PAPER NUMBER		

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/619,337		BATLAW, RAJNISH	
	<b>Examiner</b>		<b>Art Unit</b>	
	Callie E. Shosho		1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

**Claim Rejections - 35 USC § 112**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 discloses a printed substrate "a portion of which is contacted with a black offset ink composition". The scope of the claim is confusing because it is not clear if the claim is referring to a substrate which is printed with the black offset ink to form the printed substrate or a substrate which is printed and then further contacted with a black offset ink. From the claim language, the latter appears to be true. But from the paragraph bridging pages 6-7 of the specification as well as the examples found on pages 19-21 of the specification, the former appears true. Clarification is requested.

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 936257 taken in view of the evidence given in Bui et al. (U.S. 5,389,958).

EP 936257 discloses substrate including paper which is printed with offset ink comprising pigment and colored urethane resin prepared by the reaction product of alcohol such as greater than C<sub>20</sub> alcohol, polyisocyanate, and chromophore which possesses polyethylene oxide and/or polypropylene oxide chains (col. 3, lines 39-43 and 46-47, col. 4, lines 34-43, col. 6, lines 36-41, col. 7, lines 14-16, col. 11, lines 13-37, and col.15, lines 42-47). EP 936257 also discloses method comprising providing a substrate such as paper and contacting the paper with the ink (paragraphs 46 and 59-60). For further details of the method, EP 936257 refers to Bui et al. which discloses that after contacting the substrate with the ink, the substrate is heated to fix the ink to the substrate (col.4, lines 17-41 and col.5, line 63-col.6, line 11).

It is noted that paragraph 48 of EP 936257 discloses that the colored urethane resins are used as either the sole colorant or used in combination with conventional colorants such as pigments. Further, paragraph 61 of EP 936257 discloses that the colored urethane resins are used in any of the primary colors including black. Given that EP 936257 discloses that the colored urethane resins are used in combination with pigments and given that black colored urethane resins are disclosed, it is clear that when the black colored urethane resin is used in combination with pigment, a black pigment is used.

Further, it is noted that the presently claimed toner component is defined on page 10, second full paragraph of the present specification as well as the examples which disclose that the toner component is prepared by reacting chromophore with polyisocyanate followed by (optionally) reaction with long chain alcohol. Given that EP 93627 discloses the use of colored

polyurethane identical to the presently claimed toner component, i.e. obtained from reaction of chromophore, polyisocyanate, and alcohol, it is clear, absent evidence to the contrary, that the offset ink of EP 936257 will inherently possess the same hue angle, a\* value, and b\* value as presently claimed.

In light of the above, it is clear that EP 936257 anticipates the present claims.

5. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Titterington et al. (U.S. 5,780,528) taken in view of the evidence given in Bui et al. (U.S. 5,389,958).

Titterington et al. disclose substrate including paper which is printed with offset ink comprising pigment and colored compound prepared by the reaction product of alcohol such as octanol, decanol, undecanol, and dodecanol, monoisocyanate or polyisocyanate such as octadecyl isocyanate, butyl isocyanate, isophorone diisocyanate, and tetramethylene xylene diisocyanate, and chromophore which is hydroxyl or amine terminated and possesses polyethylene oxide and/or polypropylene oxide chains (col.1, line 6-8, col.2, line 66-col.3, line 2, col.4, lines 33-35 and 41-44, col.6, line 51-col.7, line 15, col.7, lines 38-57 and 62-66, col.8, lines 10-12, 19, and 24, and col. 17, lines 26-33). Titterington et al. also discloses method comprising providing a substrate such as paper and contacting the paper with the ink (col.8, lines 34-39 and col.17, lines 26-34). For further details of the method, Titterington et al. refers to Bui et al. which discloses that after contacting the substrate with the ink, the substrate is heated to fix the ink to the substrate (col.4, lines 17-41 and col.5, line 63-col.6, line 11).

It is noted that col.8, lines 10-15 and 19 of Titterington et al. disclose that the colored isocyanate derived resins are used as either the sole colorant or used in combination with

conventional colorants such as pigments. Further, col.9, lines 53-55 of Titterington et al. disclose that the colored isocyanate derived resins are used in any of the primary colors including black. Further, example 4 of Titterington et al. does disclose the use of such black colorant. Given that Titterington et al. disclose that the colored isocyanate-derived resins are used in combination with pigments and given that black isocyanate-derived resins are disclosed, it is clear that when the black isocyanate-derived resin is used in combination with pigment, a black pigment is used.

Further, it is noted that the presently claimed toner component is defined on page 10, second full paragraph of the present specification as well as the examples which disclose that the toner component is prepared by reacting chromophore with polyisocyanate followed by (optionally) reaction with long chain alcohol. Given that Titterington et al. disclose the use of compound identical to the presently claimed toner component, i.e. obtained from reaction of chromophore, polyisocyanate, and alcohol, it is clear, absent evidence to the contrary, that the offset ink of Titterington et al. will inherently possess the same hue angle,  $a^*$  value, and  $b^*$  value as presently claimed.

In light of the above, it is clear that Titterington et al. anticipate the present claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

GB 2305928 discloses hot melt ink comprising compound which is the reaction product of organic chromophore having at least one reactive hydroxyl group, monoisocyanate or polyisocyanate, and alcohol such as  $C_1$ - $C_{22}$  alcohol. However, there is no disclosure that the ink

is an offset ink as presently claimed. Further, there is no disclosure or suggestion of the hue angle,  $a^*$  value, and  $b^*$  value as presently claimed.

Prochaska et al. (U.S. 4,750,935) disclose offset ink comprising coloring agent similar to toner component utilized in the present invention. There is no disclosure or suggestion of the hue angle,  $a^*$  value, and  $b^*$  value of the ink as presently claimed.

Bonnet (U.S. 4,381,261) discloses compound made by reacting chromophore having reactive hydroxyl substituent group with polyisocyanate, and hydroxyl compound bearing groups having a polymerizable ethylenic double bond. While the compound is suitable for use in photocrosslinkable ink, there is no disclosure of offset ink as presently claimed as well as no disclosure of black pigment or hue angle,  $a^*$  value, and  $b^*$  value of the ink as presently claimed.

King et al. (U.S. 6,350,305) disclose magenta offset ink comprising colorant obtained by reacting chromophore with polyisocyanate and alcohol. There is no disclosure or suggestion of the hue angle,  $a^*$  value, and  $b^*$  value of the ink as presently claimed.

7. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Callie E. Shosho*

Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
10/30/03